**MULTICORE FLEXIBLE CABLES 0.6/1 kV**

# XLPE/PVC (Multicore) X-90

## Application

Suitable for mains, submains and sub circuits unenclosed, enclosed in conduit, buried or in underground ducts for building and industrial plants where not subject to mechanical damage. Suitable where space is at a premium and/or where conditions of overload may occur.

## Approvals

Suitable for fixed installations only, in accordance with AS/NZS 3000 + AS/NZS 5000.1

## Behaviour in flame and fire:

Flame propogation – AS/NZS 1660.5.6

## Temperature range

Maximum operating temperature: +90°C
Minimum operating temperature: -25°C

## Minimum bending radius

Installed cables: 4D
During installation: 6D

## Resistance to

Chemical exposure: Occasional
Mechanical impact: Light
Water exposure: Occasional condensation
Solar radiation and weather exposure: Occasional

## Cable design

Conductor:
Flexible bunched annealed copper conductor to AS/NZS 1125 (Class 5).

Insulation:
X-90 XLPE (Flexible XLPE)
Colour: Blue, Black, White, Red, Yellow/Green

Sheath:
5V-90 PVC
Colour: Orange

## Installation conditions

In free air
In conduit
In trench
In ground with protection
In duct

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## Physical & electrical characteristics

### XLPE/PVC (Multicore) X-90

| Product code | Conductor | | Cable | | | Min. installed bending radius mm |
|---|---|---|---|---|---|---|
| | Nominal C.S.A. mm² | Number of Cores | Nominal insulation thickness mm | Nominal overall diameter mm | Approx. mass kg/100 m | |
| 104CEFF90 | 10 | 4C+E | 0.7 | 17.6 | 58.8 | 70 |
| 164CEFF90 | 16 | 4C+E | 0.7 | 20.7 | 85.2 | 85 |
| 254CEFF90 | 25 | 4C+E | 0.9 | 24.5 | 122.2 | 100 |
| 354CEFF90 | 35 | 4C+E | 0.9 | 27.3 | 162.3 | 110 |
| 504CEFF90 | 50 | 4C+E | 1.0 | 32.6 | 234.2 | 135 |
| 704CEFF90 | 70 | 4C+E | 1.1 | 38 | 332.8 | 155 |
| 954CEFF90 | 95 | 4C+E | 1.1 | 42.7 | 420.9 | 175 |

### XLPE/PVC (Multicore) X-90

| Nominal conductor area mm² | Unenclosed | | Buried direct A | Underground wiring enclosure A | Maximum DC resistance @ 20oC Ω/KM | Three phase* voltage drop (@ 50Hz & 90°C) mV/A. m |
|---|---|---|---|---|---|---|
| | Spaced A | Touching A | | | | |
| TWO CORE | | | | | | |
| 10 | 78 | 72 | 75 | 74 | 1.91 | 4.22 |
| 16 | 103 | 96 | 132 | 95 | 1.21 | 2.68 |
| 25 | 136 | 128 | 170 | 124 | 0.78 | 1.73 |
| 35 | 169 | 158 | 205 | 150 | 0.554 | 1.23 |
| 50 | 213 | 199 | 244 | 186 | 0.386 | 0.866 |
| 70 | 269 | 251 | 300 | 231 | 0.272 | 0.618 |
| 95 | 322 | 300 | 360 | 271 | 0.206 | 0.477 |
| THREE & FOUR CORE | | | | | | |
| 10 | 66 | 61 | 63 | 62 | 1.91 | 4.22 |
| 16 | 87 | 81 | 110 | 79 | 1.21 | 2.68 |
| 25 | 116 | 108 | 143 | 103 | 0.78 | 1.73 |
| 35 | 144 | 135 | 172 | 127 | 0.554 | 1.23 |
| 50 | 182 | 170 | 204 | 155 | 0.386 | 0.866 |
| 70 | 230 | 214 | 251 | 193 | 0.272 | 0.618 |
| 95 | 275 | 256 | 302 | 226 | 0.206 | 0.477 |

Note: Refer to Cable Selection in Technical Cable Guide for more information and data based on AS/NZS 3008.1.1.

*To determine the single phase Voltage drop value, the current in the neutral conductor needs to be considered by multiplying the three phase value by 1.155

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